Memorandum

Date:

December 12, 2006

Telephone:

(916) 654-4996

To:

Jackalyne Pfannenstiel, Chairman

James D. Boyd, Vice Chair

Arthur H. Rosenfeld, Ph.D., Commissioner

John L. Geesman, Commissioner Jeffrey Byron, Commissioner

From:

California Energy Commission – B. B. Blevins

1516 Ninth Street

Executive Director

Sacramento, CA 95814-5512

DOCKET
06-AFC-9

DATE DEC 12 2006

RECD. DEC 12 2006

Subject:

COLUSA GENERATING STATION, REVISED DATA ADEQUACY RECOMMENDATION (06-AFC-9)

On November 6, 2006, E&L Westcoast, LLC (E&LW), submitted an Application for Certification (AFC), to construct and operate the Colusa Generating Station (CGS). E&LW had requested a 6-month AFC review process schedule. However, E&LW has filed AFC supplemental information and is no longer requesting consideration for the 6-month expedited review process.

Staff's December 6, 2006 initial data adequacy review of the CGS AFC determined that it did not meet all the requirements listed in Title 20, section 1704, and Division 2, Chapter 5, Appendix B of the California Code of Regulations for the 6-month and 12-month process. Specifically, the AFC was deficient in 5 areas for the 6-month process and 3 areas for the 12-month process. Subsequent to publishing our December 6, 2006 recommendation that the Commission deem the AFC data inadequate, E&LW provided an AFC Supplement on December 12, 2006. Staff has reviewed the supplemental information and believes the AFC now meets the requirements for a 12-month review process for all technical disciplines.

Attached is a summary table and revised data adequacy worksheets for the three technical disciplines previously determined to be data inadequate, reflecting that the supplemental information submitted by E&LW achieves AFC data adequacy.

At the Energy Commission's Business Meeting on December 13, 2006, I will now recommend that the Energy Commission accept the CGS AFC with the supplemental information as data adequate for the 12-month review process and request that a Committee be appointed.

If you have any questions, please call Jack W. Caswell, staff's Project Manager, at (916) 653-0062.

Attachments:

ATTACHMENT A OVERVIEW OF ENERGY COMMISSION STAFF'S REVISED DATA ADEQUACY DETERMINATION COLUSA GENERATING STATION 06-AFC-9

TECHNICAL AREA	ATTACHMENT B	ADEQUATE?	ADEQUATE?
	Page No	6-Month	12-M onth
AIR QUALITY	4	N/A	YES
NOISE AND VIBRATION	10	N/A	YES
TRANSMISSION SYSTEM ENG	14	N/A	YES

ATTACHMENT B

ENERGY COMMISSION STAFF'S List of Revised Data Adequacies

Colusa Generating Station 06-AFC-9

December 12, 2006

Adequacy Issue: Revision No. December 12, 2006 Adequate Inadequate 01 Date DATA ADEQUACY WORKSHEET X Project: Colusa Generating Station William Walters Technical Area: Technical Staff: Air Quality 06-AFC-09 Project Manager: Jack Caswell Docket: Technical Senior: Keith Golden

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	Section 8.1.1 page 8.1-1 to 8.1-4 Tables 8.1-1 to 8.1-7 page 8.1-34 to 8.1-38 Sections 8.1.2 and 8.1.3 page 8.1-4 to 8.1-14 Tables 8.1-8 to 8.1-28 pages 8.1-39 to 8.1-52 Section 8.1.5.10.2 page 8.1-24 to 8.1-30 Appendix G4 to G6 Section 3.4.9.4 page 3-13 Supplement to AFC Appendix A, B C	NO Yes	Need to identify specific locations and quantity of emission reduction credits that are earmarked for this project. Also, need to include a discussion of the effectiveness of the identified emission reduction credits (offsets) in mitigating the project impacts.
Appendix B (g) (8) (A)	The information necessary for the air pollution control district where the project is located to complete a Determination of Compliance.	Supplement to AFC Appendix A, B C	NO Yes	Please provide a Colusa County APCD written notification that the project application is sufficient to complete a Determination of Compliance.
Appendix B (g) (8) (B)	The heating value and chemical characteristics of the proposed fuels, the stack height and diameter, the exhaust velocity and temperature, the heat rate and the expected capacity factor of the proposed facility.	Table 3.4-3 page 3-38 Section 3.4.3.2 page 3-4, Table 3.4-2 page 3-37, and Appendix G3 Figures 3.4-4A to 3.4-4D Section 1.5 page 1-3 Supplement to AFC Appendix A, B C	NO Yes	Please provide the stack heights and diameters and exhaust velocities and temperatures of the auxiliary boiler, emergency engine and fire pump engine.
Appendix B (g) (8) (C)	A description of the control technologies proposed to limit the emission of criteria pollutants.	Section 3.4.9 page 3-12 and 3-13 Section 3.4.11.8 Page 3-15 Section 8.1.2.2 Page 8.1-5 to 8.1-7 Section 8.1.5.10.2 page 8.1-24 to 8.1-30	YES	
Appendix B (g) (8) (D)	A description of the cooling system, the estimated cooling tower drift rate, the rate of water flow through the cooling tower, and the maximum concentrations of total dissolved solids.	Section 3.4.3.4 p. 3-5 (note: Dry Cooling is proposed)	YES	

Adequacy Issue:	Adequate X Inadequate	X DAT	A ADEQUACY WORKSHEET	Revision No. 01	Date December 12, 2006
Technical Area:	Air Quality	Project:	Colusa Generating Station	Technical Staff:	William Walters
Project Manager:	Jack Caswell	Docket:	06-AFC-09	Technical Senior:	Keith Golden

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (E)	The emission rates of criteria pollutants from the stack, cooling towers, fuels and materials handling processes, delivery and storage systems, and from all secondary emission sources.	Table 8.1-14 to 8.1-21 page 8.1-44 to 8.1-48 Appendix G3	YES	
Appendix B (g) (8) (F)	A description of typical operational modes, and start-up and shutdown modes for the proposed project, including the estimated frequency of occurrence and duration of each mode, and estimated emission rate for each criteria pollutant during each mode.	Section 8.1.2.2 page 8.1-5 to 8.1-7 Table 8.1-14 to 8.1-20 page 8.1-44 to 8.1-47 Appendix G3	YES	
Appendix B (g) (8) (G)	The ambient concentrations of all criteria pollutants for the previous three years as measured at the three Air Resources Board certified monitoring stations located closest to the project site, and an analysis of whether this data is representative of conditions at the project site. The applicant may substitute an explanation as to why information from one, two, or all stations is either not available or unnecessary.	Section 8.1.1.2 page 8.1-3 Tables 8.1-2 to 8.1-7 page 8.1-35 to 8.1-38	YES	
Appendix B (g) (8) (H)	One year of meteorological data collected from either the Federal Aviation Administration Class 1 station nearest to the project or from the project site, or meteorological data approved by the California Air Resources Board or the local air pollution control district.	Section 8.1.2.3 page 8.1-8 to 8.1-10 Supplement to AFC Appendix A, B C	NO Yes	Please provide an electronic copy of the meteorological data used in the air dispersion analysis. The meteorological data files were not provided with the AFC.

Adequacy Issue:	Adequate X Inadequate	X DAT	A ADEQUACY WORKSHEET	Revision No. 01	Date December 12, 2006
Technical Area:	Air Quality	Project:	Colusa Generating Station	Technical Staff:	William Walters
Project Manager:	Jack Caswell	Docket:	06-AFC-09	Technical Senior:	Keith Golden

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (H) (i)	If the data is collected from the project site, the applicant shall demonstrate compliance with the requirements of the U.S. Environmental Protection Agency document entitled "On-Site Meteorological Program Guidance for Regulatory Modeling Applications" (EPA - 450/4-87-013 (August 1995), which is incorporated by reference in its entirety.)	N/A	N/A	
Appendix B (g) (8) (H) (ii)	The data shall include quarterly wind tables and wind roses, ambient temperatures, relative humidity, stability and mixing heights, upper atmospheric air data, and an analysis of whether this data is representative of conditions at the project site.	Appendix G1 Section 8.1.2.3 page 8.1-8 to 8.1-10 Supplement to AFC Appendix A, B C	NO Yes	Please provide an electronic copy of the meteorological data used in the air dispersion analysis. The meteorological data files were not provided with the AFC.
Appendix B (g) (8) (I)	An evaluation of the project's direct and cumulative air quality impacts, consisting of the following:			
Appendix B (g) (8) (I) (i)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct inert pollutant impacts of project construction activities on ambient air quality conditions, including fugitive dust (PM ₁₀) emissions from grading, excavation and site disturbance, as well as the combustion emissions [nitrogen oxides (NO _x), sulfur dioxide (SO ₂), carbon monoxide (CO), and particulate matter less than 10 microns in diameter (PM ₁₀)] from construction-related equipment;	Section 8.1.2.3 page 8.1-10 and page 8.1-12 Table 8.1-22 page 8.1-48 Table 8.1-24 page 8.1-50 Appendix G4 Supplement to AFC Appendix A, B C	NO Yes	Please provide the air dispersion analysis modeling input/output files. The modeling files were not provided with the AFC.

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Adequacy Issue:	Adequate X Inadequate	X DAT	A ADEQUACY WORKSHEET	Revision No. 01	Date December 12, 2006
Technical Area:	Air Quality	Project:	Colusa Generating Station	Technical Staff:	William Walters
Project Manager:	Jack Caswell	Docket:	06-AFC-09	Technical Senior:	Keith Golden

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (I) (ii)	A screening level air quality modeling analysis, or a more detailed modeling analysis if so desired by the applicant, of the direct inert criteria pollutant (NO _x , SO ₂ , CO and PM ₁₀) impacts on ambient air quality conditions of the project during typical (normal) operation, and during shutdown and startup modes of operation. Identify and include in the modeling of each operating mode the estimated maximum emissions rates and the assumed meteorological conditions; and	Section 8.1.2.3 page 8.1-10 to page 8.1-12 Table 8.1-23 to Table 8.1-28 page 8.1-49 to page 8.1-52 Appendix G6 Supplement to AFC Appendix A, B C	NO Yes	Please provide the air dispersion analysis modeling input/output files. The modeling files were not provided with the AFC.
Appendix B (g) (8) (I) (iii)	A protocol for a cumulative air quality modeling impacts analysis of the project's typical operating mode in combination with other stationary emissions sources within a six mile radius which have received construction permits but are not yet operational, or are in the permitting process. The cumulative inert pollutant impact analysis should assess whether estimated emissions concentrations will cause or contribute to a violation of any ambient air quality standard.	Appendix G1	YES	
Appendix B (g) (8) (J)	If an emission offset strategy is proposed to mitigate the project's impacts under subsection (g)(1), provide the following information:			
Appendix B (g) (8) (J) (i)	The quantity of offsets needed;	Supplement to AFC Appendix A, B C	NO Yes	Please provide the tabulated quantities of offsets needed. The confidential ERC source information submittal noted on page 8.1-15 was not received with the AFC.
Appendix B (g) (8) (J) (ii)	Potential offset sources, including location, and quantity of emission reductions; and	Section 8.1.4 page 8.1-14 and 8.1-15 <u>Supplement to</u> <u>AFC Appendix A, B C</u>	NO Yes	Please provide a list of offset sources including locations, quantities, and methods of emission reductions. The confidential ERC source information submittal noted on page 8.1-15 was not received with the AFC.

Adequacy Issue:	Adequate X Inadequate	X DAT	A ADEQUACY WORKSHEET	Revision No. 01	Date December 12, 2006
Technical Area:	Air Quality	Project:	Colusa Generating Station	Technical Staff:	William Walters
Project Manager:	Jack Caswell	Docket:	06-AFC-09	Technical Senior:	Keith Golden

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (8) (J) (iii)	Method of emission reduction.	Section 8.1.4 page 8.1-14 and 8.1-15 <u>Supplement to</u> <u>AFC Appendix A, B C</u>	NO Yes	Please provide a list of offset sources including locations, quantities, and methods of emission reductions. The confidential ERC source information submittal noted on page 8.1-15 was not received with the AFC.
Appendix B (g) (8) (K)	A topographic map containing contour and elevation data, at a scale of 1:24,000, showing the area within 6 miles of the power plant site.	Figure 8.1-1A and 8.1-1B	YES	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table 8.1-29 page 8.1-53 to 8.1-55 <u>Supplement to AFC Appendix A, B C</u>	NO Yes	The identified table does not reference correctly the appropriate sections, tables and pages that discuss conformance with laws, regulations and standards. Please correct this table to the appropriate sections, tables and pages of the AFC.
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 8.1.7 page 8.1-31	YES	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 8.1.2.4 page 8.1-11 to 8.1-12 Section 8.1.2.5 page 8.1-13 Section 8.1.5 page 8.1-15 to 8.1-23	YES	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Section 8.1.6 page 8.1-30	YES	

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Adequacy Issue:	Adequate X	Inadequate	X	DATA	A ADEQUACY WORKSHEET	Revision No.	01	Date	December 12, 2006
Technical Area:	Air Quality	•	Pro	roject:	Colusa Generating Station	Technical St	aff:	Willia	m Walters
Project Manager:	Jack Caswell		Do	ocket:	06-AFC-09	Technical Se	enior:	Keith	Golden

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 8.1.7 page 8.1-31 Supplement to AFC Appendix A, B C	NO Yes	Description of the steps the applicant has taken to ensure that the air pollution control district 180 day permit review cycle (page 8.1-31) will be expedited to meet the necessary project schedule requirements for the six month AFC process requested by the applicant.

Adequacy Issue:	Adequate \underline{X}	Inadequate	X DA	TA ADEQUACY WORKSHEET	Revision No.	<u>01</u>	Date	November 16, 2006 December 12, 2006
Technical Area:	Noise	_	Project:	Colusa Generating Station	Technical Sta	ıff:	Steve	Baker
Project Manager:	Jack Caswell		Docket:	06-AFC-9	Technical Ser	nior:	Steve	Baker

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (1)	provide a discussion of the existing site conditions, the expected direct, indirect and cumulative impacts due to the construction, operation and maintenance of the project, the measures proposed to mitigate adverse environmental impacts of the project, the effectiveness of the proposed measures, and any monitoring plans proposed to verify the effectiveness of the mitigation.	§§ 1.1, 1.6, 1.10, 1.11.15, 3.2, 3.4.3.1, 3.4.3.5, 3.9.2.2; Table 3.9-1; Chapter 8.5; §§ 8.7.3.1, 8.7.3.2; Tables 8.7-1, 8.7-2	Yes	
Appendix B (g) (4) (A)	A land use map which identifies residences, hospitals, libraries, schools, places of worship, or other facilities where quiet is an important attribute of the environment within the area impacted by the proposed project. The area impacted by the proposed project is that area where there is a potential increase of 5 dB(A) or more, during either construction or operation, over existing background levels.	Figure 8.5-1	Yes	

Adequacy Issue:	Adequate \underline{X}	Inadequate	X DA	TA ADEQUACY WORKSHEET	Revision No.	<u>01</u>	Date	November 16, 2006 December 12, 2006
Technical Area:	Noise	_	Project:	Colusa Generating Station	Technical Sta	ıff:	Steve	Baker
Project Manager:	Jack Caswell		Docket:	06-AFC-9	Technical Ser	nior:	Steve	Baker

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (B)	A description of the ambient noise levels at those sites identified under subsection (g)(4)(A) which the applicant believes provide a representative characterization of the ambient noise levels in the project vicinity, and a discussion of the general atmospheric conditions, including temperature, humidity, and the presence of wind and rain at the time of the measurements. The existing noise levels shall be determined by taking noise measurements for a minimum of 25 consecutive hours at a minimum of one site. Other sites may be monitored for duration at the applicant's discretion during the same 25-hour period. The results of the noise level measurements shall be reported in L_{eq} (equivalent sound or noise level), L_{dn} (day-night sound or noise level) or CNEL (Community Noise Equivalent Level) in units of dB(A). The L_{10} , L_{50} , and L_{90} values (noise levels exceeded 10 percent, 50 percent, and 90 percent of the time, respectively) shall also be reported.	§ 8.5.1.3; Table 8.5-4	No Yes	Provide a discussion of the general atmospheric condition, including temperature, humidity, and the presence of wind and rain at the time of the ambient noise level measurements.
Appendix B (g) (4) (C)	A description of the major noise sources of the project, including the range of noise levels and the tonal and frequency characteristics of the noise emitted.	§ 8.5.2.2; Table 8.5-5	Yes	
Appendix B (g) (4) (D)	An estimate of the project noise levels, during both construction and operation, at residences, hospitals, libraries, schools, places of worship or other facilities where quiet is an important attribute of the environment, within the area impacted by the proposed project.	§§ 8.5.2.1, 8.5.2.2; Tables 8.5-6, 8.5-7	Yes	
Appendix B (g) (4) (E)	An estimate of the project noise levels within the project site boundary during both construction and operation and the impact to the workers at the site due to the estimated noise levels.	§§ 8.5.2.3 <u>, 8.7.3.1</u> , 8.7.3.2	No Yes	§ 8.5.2.3 addresses worker noise impacts only during plant operation. Please address worker noise impacts and protection plans during the construction phase.

Adequacy Issue:	Adequate \underline{X}	Inadequate	X DA	TA ADEQUACY WORKSHEET	Revision No.	<u>01</u>	Date	November 16, 2006 December 12, 2006
Technical Area:	Noise	_	Project:	Colusa Generating Station	Technical Sta	ıff:	Steve	Baker
Project Manager:	Jack Caswell		Docket:	06-AFC-9	Technical Ser	nior:	Steve	Baker

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (g) (4) (F)	The audible noise from existing switchyards and overhead transmission lines that would be affected by the project and estimates of the future audible noise levels that would result from existing and proposed switchyards and transmission lines. Noise levels shall be calculated at the property boundary for switchyards and at the edge of the rights-of-way for transmission lines.	N/A	N/A	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Table <u>s</u> 8.5-8 <u>, 8.7-4</u>	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	§ 8.5.6	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	§§ 8.5.2.1, 8.5.2.2, 8.5.2.3, 8.5.4.1, 8.5.4.2, <u>8.7.3.1</u> , <u>8.7.3.2</u> ; Tables 8.5-6, 8.5-7, <u>8.7-1, 8.7-2</u>	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	§ 8.5.6	Yes	

Adequacy Issue:	Adequate <u>X</u>	Inadequate	×	DATA	A ADEQUACY WORKSHEET	Revision No.	<u>01</u>	Date	November 16, 2006 December 12, 2006
Technical Area:	Noise	<u>-</u>	Pro	oject:	Colusa Generating Station	Technical Sta	aff:	Steve	Baker
Project Manager:	Jack Caswell		Doo	cket:	06-AFC-9	Technical Se	nior:	Steve	Baker

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	§ 8.5.7	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 01	Date December 12, 2006
Technical Area:	Transmission System Eng.	Project:	Colusa Generating Station	Technical Staff:	Ajoy Guha, P.E., Sudath Arachchige
Project Manager:	Jack Caswell	Docket:	06-AFC-9	Technical Senior:	Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (i) (2) (A)	A discussion of the need for the additional electric transmission lines, substations, or other equipment, the basis for selecting principal points of junction with the existing electric transmission system, and the capacity and voltage levels of the proposed lines, along with the basis for selection of the capacity and voltage levels.	Section 5.1, Page 5-1. Section 5.2, Pages 5-1 to 5-3. Section 3.4.4, Page 3-6.	Yes	
Appendix B (i) (2) (B)	A discussion of the extent to which the proposed electric transmission facilities have been designed, planned, and routed to meet the transmission requirements created by additional generating facilities planned by the applicant or any other entity.	Section 3.4.4, Page 3-6. Figures 3.4-6, 3.4-7 & 3.4-8 Section 5.2, Pages 5-1 to 5-3. Section 9, Pages 9-9 and 9-10	Yes	

Adequate X Inadequate DATA ADEQUACY WORKSHEET Revision No. 01

06-AFC-9

Docket:

Technical Area: Transmission System Eng. Project: Colusa Generating Station Technical Staff: Ajoy Guha, P.E., Sudath Arachchige

SITING INFORMATION AFC PAGE NUMBER AND **A**DEQUATE INFORMATION REQUIRED TO MAKE AFC CONFORM **REGULATIONS SECTION NUMBER** WITH REGULATIONS YES OR NO A detailed description of the design, Appendix B Section 5.5, Pages 5-3 to No In respect of the submitted System impact Study construction, and operation of any electric (SIS) dated September 19, 2005, provide the (b) (2) (C) 5-6. Yes transmission facilities, such as power lines, following information: substations, switchyards, or other transmission Transmission 1. List all major study assumptions in the base equipment, which will be constructed or Interconnection System cases performed with 2010 summer peak. modified to transmit electrical power from the Impact Study, Section 3 & summer off-peak and spring off-peak system conditions including imports and exports to proposed power plant to the load centers to be 4, Pages 5-7. served by the facility. Such description shall Appendix F the system, major Path flows (such as Path include the width of rights of way and the 15 & 26, COI, EOR, SCIT etc.), major generations in the system including hydro, physical and electrical characteristics of AFC Supplement, electrical transmission facilities such as towers. December 2006 loads in the area systems 2. For identified N-2 overloads, provide power Appendix D conductors, and insulators. This description Appendix E flow diagrams with and without the CGS for Nshall include power load flow diagrams which 2 contingencies under 2010 summer peak & demonstrate conformance or nonconformance spring off-peak system conditions. with utility reliability and planning criteria at the time the facility is expected to be placed in The SIS identifies the following mitigation operation and five years thereafter; and measures for identified overloads on some transmission lines: 1. Reconductoring the Palermo-Bogue and Palermo-East Nicolaus 115 kV lines (PG&E Project # T686) 2. Reconductoring the Shasta-Flanagen-Keswick 8.75 -mile 230 kV line by WAPA. 3. Building a new 26-mile O"Banion-Elevrta and Natomas double circuit 230 kV line jointly by WAPA, SMUD and the City of Roseville. 4. Expanding WAPA's Folsom 230 kV substation and looping in SMUD's existing Orangeville-Lake 230 kV line via two short lines. For each Project stated above, provide a full description with one line diagrams showing pre-project and post-project facilities. For their environmental settings and impacts, provide routes and environmental analysis and any recommended mitigation measures.

Adequacy Issue:

Project Manager:

Jack Caswell

December 12, 2006

Date

Mark Hesters

Technical Senior:

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 01	Date December 12, 2006
Technical Area:	Transmission System Eng.	Project:	Colusa Generating Station	Technical Staff:	Ajoy Guha, P.E., Sudath Arachchige
Project Manager:	Jack Caswell	Docket:	06-AFC-9	Technical Senior:	Mark Hesters

SITING REGULATIONS	Information	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (b) (2) (D)	A description of how the route and additional transmission facilities were selected, and the consideration given to engineering constraints, environmental impacts, resource conveyance constraints, and electric transmission constraints.	Section 5.5, Pages 5-3 to 5-6. System Impact study, Section 12, Pages 21-25. Section 9, pages 9-9 and 9-10.	Yes	
Appendix B (h) (1) (A)	Tables which identify laws, regulations, ordinances, standards, adopted local, regional, state, and federal land use plans, and permits applicable to the proposed project, and a discussion of the applicability of each. The table or matrix shall explicitly reference pages in the application wherein conformance, with each law or standard during both construction and operation of the facility is discussed;	Section 3.10.4, Page 3-32. Appendix E.	Yes	
Appendix B (h) (1) (B)	Tables which identify each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the commission to certify sites and related facilities.	Section 3.11, Pages 3-32 to 3-34.	Yes	
Appendix B (h) (2)	A discussion of the conformity of the project with the requirements listed in subsection (h)(1)(A).	Section 3.10.4, Page 3-32. Appendix E.	Yes	
Appendix B (h) (3)	The name, title, phone number, and address, if known, of an official within each agency who will serve as a contact person for the agency.	Section 3.11, Pages 3-32 to 3-34.	Yes	

Adequacy Issue:	Adequate X Inadequate	DAT	A ADEQUACY WORKSHEET	Revision No. 01	Date December 12, 2006
Technical Area:	Transmission System Eng.	Project:	Colusa Generating Station	Technical Staff:	Ajoy Guha, P.E., Sudath Arachchige
Project Manager:	Jack Caswell	Docket:	06-AFC-9	Technical Senior:	Mark Hesters

SITING REGULATIONS	INFORMATION	AFC PAGE NUMBER AND SECTION NUMBER	ADEQUATE YES OR NO	INFORMATION REQUIRED TO MAKE AFC CONFORM WITH REGULATIONS
Appendix B (h) (4)	A schedule indicating when permits outside the authority of the commission will be obtained and the steps the applicant has taken or plans to take to obtain such permits.	Section 3.11, Pages 3-32 to 3-34. AFC Supplement, December 2006	No Yes	Inform when the CA ISO preliminary and final approvals are expected to be obtained.